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REMARKS

Claims 1-3 and 8-14 are pending. Claims 4-7 have been canceled.

Claims 1 and 9 have been amended to clarify the subject matter. In particular, claims 1 and 9 have been amended to recite that "the high concentration source region is in direct contact with the substrate." Support for this amendment can be found in, for example, FIG. 4 of the current application. No new matter has been added.

Claims 10 through 14 have been cosmetically amended for proper antecedent basis. No new matter has been added.

Claim Objections

Claims 12 and 13 have been objected to as being a substantial duplicate of claims 2 and 3.

Claims 12 and 13 have been amended to depend from claim 9 instead of claim 8. As a result, applicants respectfully request withdrawal of the objection.

Claim Rejections 35 USC 112

In claims 10, 11 and 12, the office action indicates that the phrase "third drain region" lacks antecedent basis.

Claims 10-12 have been amended to depend from claim 9 instead of claim 8. As a result, applicants respectfully request withdrawal of this rejection.

Claims Rejections 35 USC 102

Claims 1, 8-11 and 14 have been rejected as being anticipated by Tung (US 6,117,738).

Applicants respectfully disagree for the following reasons.

Claim 1 has been amended to recite.

1. (Currently Amended) A semiconductor device comprising:
a gate electrode formed on a first conductive type semiconductor substrate through a gate oxide film;
a first low concentration drain region of a second conductive type provided at one end of said gate electrode;

a second low concentration drain region of the second conductive type, provided in said first low concentration drain region, said second low concentration drain region being disposed close to an outer boundary of said first low concentration drain region and being higher in impurity concentration than at least an impurity concentration of the first low concentration drain region, wherein at least part of said second low concentration drain region is extended to an area under said gate electrode;

a high concentration source region of the second conductive type provided at another end of said gate electrode, **wherein the high concentration source region is in direct contact with the substrate;**
and

a high concentration drain region of the second conductive type formed in said second low concentration drain region, said high concentration drain region being spaced away a predetermined distance from said gate electrode and being higher in impurity concentration than the second low concentration drain region. (Emphasis Added)

Applicants respectfully assert that the Tung reference fails to teach or suggest the above bolded features. For example, Fig. 2D of Tung shows a source region 218 disposed over substrate 200 **but** through a multi-well structure composed of N well 210, P well 208 and P well 204. The Tung reference states in the abstract that:

A method for fabricating an improved structure of a high-bias device includes forming multiple doped wells between source/drain regions and a P-type substrate. The doped wells have an increasing order of dopant density from the P-type substrate for the P-type dopant or from a first N-type well for an N-type dopant. The doped multiple wells enclose the source/drain regions so that the **source/drain regions do not directly contact** with the substrate. (Emphasis Added)

That is, the multi-well structure is arranged to prevent the source/drain regions from direct contact with the substrate. In contrast, "the high concentration source region is in direct contact with the substrate" as recited in amended claim 1 of the present invention. Thus, the Tung reference does not teach or suggest amended claim 1 for at least this reason.

Claim 8 depends from claim 1 and should be allowable for at least the same reasons as base claim 1.

Claim 9 has been amended to incorporate the above bolded features of amended claim 1. Since amended claim 9 recites similar subject matter as amended claim 1 above, amended claim 9 should be allowable for at least the same reasons as claim 1 above. Claims 10-14 have been

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amended to depend from claim 9. Thus, claims 10, 11 and 14 should be allowable for at least the same reasons as base claim 9.

Claims Rejections 35 USC 103

Claims 2, 3, 12 and 13 have been rejected as being unpatentable over Tung in view of Wolf (Silicon Processing for the VLSI Era – Vol. 3: The Submicron MOSFET).

Amended claim 1 above should be allowable for the reasons above. Claims 2 and 3 depend from base claim 1 and should be allowable for at least the same reasons as claim 1 above.

Amended claim 9 above should be allowable for the reasons above. Claims 10-14 have been amended to depend from claim 9. Thus, claims 12 and 13 should be allowable for at least the same reasons as base claim 9.

Drawings

Fig. 2 has been objected to for containing “5B,” which is not mentioned in the specification.

Applicants submit corrected drawings FIGS. 1 and 2 with the reference “5B” replaced with “5.” Applicants also submit corrected drawings FIGS. 5 and 6 with the designation “Prior Art.” Withdrawal of this objection is respectfully requested.

No fee is believed due at this time. However, if any fee is due, please apply charges (or credits) to deposit account 06-1050.

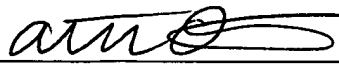
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Respectfully submitted,

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